

I/WE CLAIM:

1. A method of scheduling a first task within a computing device, comprising the steps of:
 - a. maintaining a work queue of a plurality of waiting tasks awaiting scheduling;
 - b. attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task; and
 - c. if at least one selected task is located, combining the at least one selected task with the first task to form a combined task, and scheduling the combined task.
2. The method of claim 1 wherein each task has an associated priority, and wherein the method comprises the further step of selecting as the first task a waiting task for which no other waiting task has a higher priority.
3. The method of claim 2 wherein the step of attempting to locate at least one selected task considers only waiting tasks having a priority equal to that of the first task.
4. A processor for scheduling a first task within a computing device, comprising:
 - a. instructions for accessing a work queue of a plurality of waiting tasks awaiting scheduling;
 - b. instructions for attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task; and

- c. instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that at least one selected task is located
- 5. The processor of claim 4 wherein each task has an associated priority, and wherein the processor further comprises instructions for selecting as the first task a waiting task for which no other waiting task has a higher priority.
- 6. The processor of claim 5 wherein the instructions for attempting to locate at least one selected task comprise instructions for considering only waiting tasks having a priority equal to that of the first task.
- 7. A software-readable medium containing instructions for scheduling a first task within a computing device, comprising:
 - a. instructions for accessing a work queue of a plurality of waiting tasks awaiting scheduling;
 - b. instructions for attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task; and
 - c. instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that at least one selected task is located
- 8. The software-readable medium of claim 7 wherein each task has an associated priority, and wherein the processor further comprises instructions for selecting as the first task a waiting task for which no other waiting task has a higher priority.

9. The software-readable medium of claim 8 wherein the instructions for attempting to locate at least one selected task comprise instructions for considering only waiting tasks having a priority equal to that of the first task.
10. A method of scheduling a first task within a computing device, comprising the steps of:
 - a. maintaining a work queue of a plurality of waiting tasks awaiting scheduling;
 - b. determining whether the computing device has sufficient resources to execute the first task; and
 - c. if the computing device has sufficient resources to execute the first task, the further steps of:
 - d. attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task; and
 - e. if at least one selected task is located, combining the at least one selected task with the first task to form a combined task, and scheduling the combined task.
11. The method of claim 10 further comprising the steps of:
 - a. if the computing device does not have sufficient resources to execute the first task, the further steps of:
 - b. determining whether the first task is time sensitive;
 - c. if the first task is time sensitive, rejecting the first task; and
 - d. if the first task is not time sensitive, attempting to schedule a second task before attempting to schedule the first task.

12. A processor for scheduling a first task within a computing device, comprising:
 - a. instructions for accessing a work queue of a plurality of waiting tasks awaiting scheduling;
 - b. instructions for determining whether the computing device has sufficient resources to execute the first task;
 - c. instructions for attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task, in the event that the computing device has sufficient resources to execute the first task; and
 - d. instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that the computing device has sufficient resources to execute the first task and that at least one selected task is located.
13. The processor of claim 12 further comprising:
 - a. instructions for determining whether the first task is time sensitive, in the event that the computing device does not have sufficient resources to execute the first task;
 - b. instructions for rejecting the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is time sensitive; and
 - c. instructions for attempting to schedule a second task before attempting to schedule the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is not time sensitive.

14. A software-readable medium comprising instructions for scheduling a first task within a computing device, comprising:
 - a. instructions for accessing a work queue of a plurality of waiting tasks awaiting scheduling;
 - b. instructions for determining whether the computing device has sufficient resources to execute the first task;
 - c. instructions for attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task, in the event that the computing device has sufficient resources to execute the first task; and
 - d. instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that the computing device has sufficient resources to execute the first task and that at least one selected task is located.
15. The software-readable medium of claim 14 further comprising:
 - a. instructions for determining whether the first task is time sensitive, in the event that the computing device does not have sufficient resources to execute the first task;
 - b. instructions for rejecting the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is time sensitive; and
 - c. instructions for attempting to schedule a second task before attempting to schedule the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is not time sensitive.